



Quarterly Meeting and Conference Call Oct. 29, 2009

Office of the Arizona State Treasurer

Treasurer Dean Martin

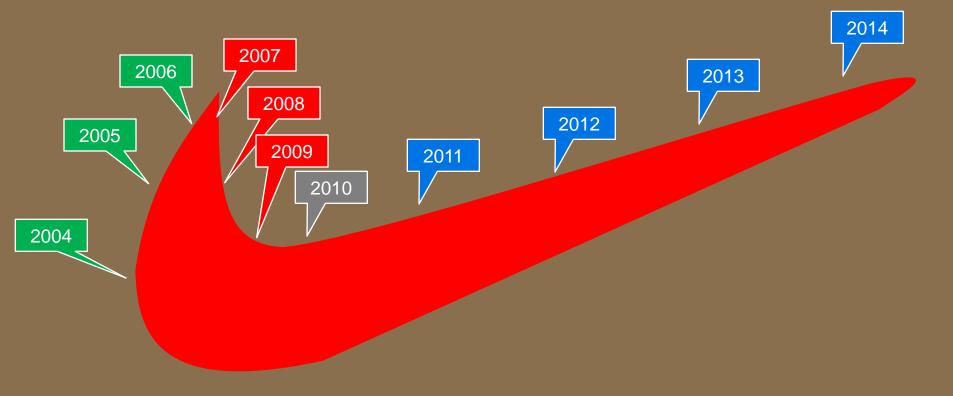
AGENDA Oct. 29, 2009

- Economic Outlook
- Interest Rate Outlook
- LGIP Update
- New LGIP Website/Improvements
- Legislative Update
- Endowment Update
- Q & A

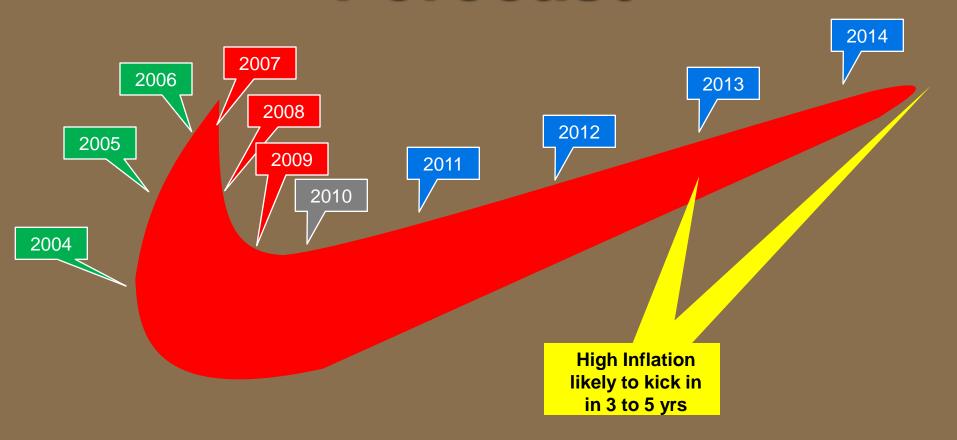
Economic Forecast



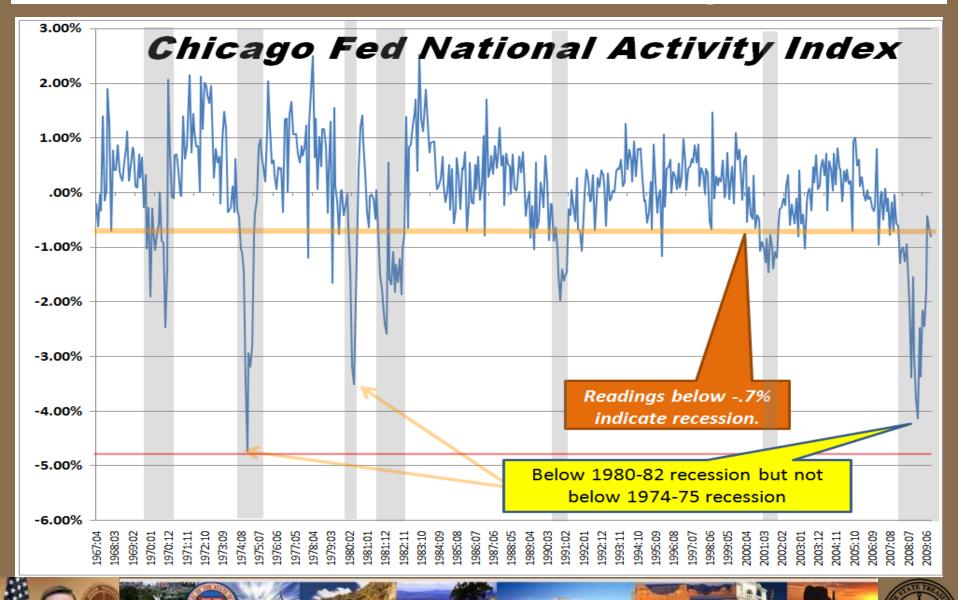
"Nike" Whoosh Forecast



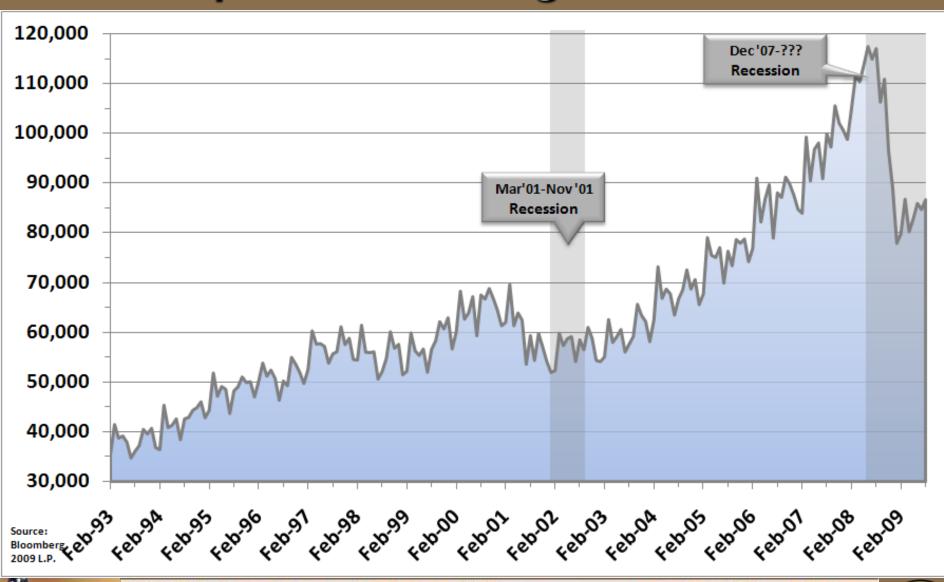
"Nike" Whoosh Forecast



Is the US Recession nearing an end?

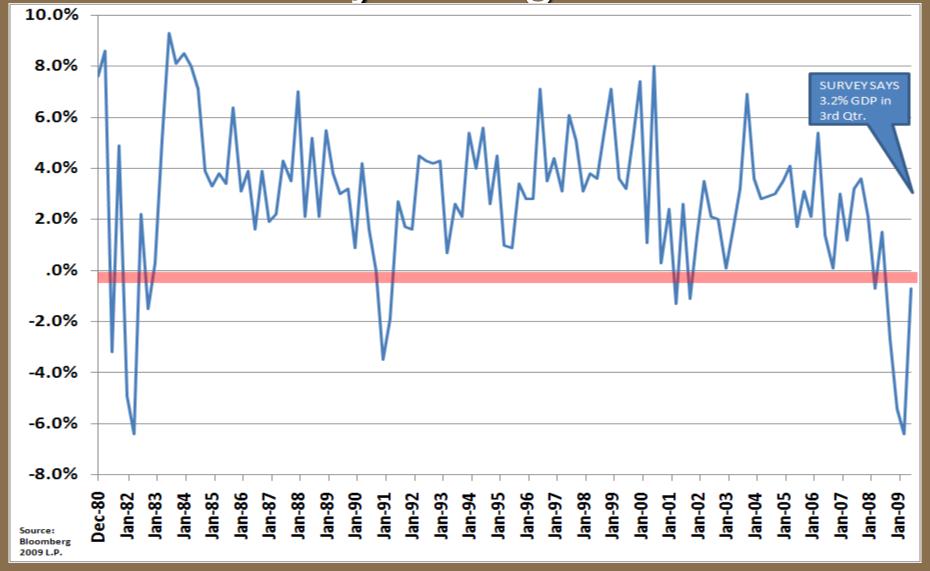


US Exports stabilizing after '08 crash



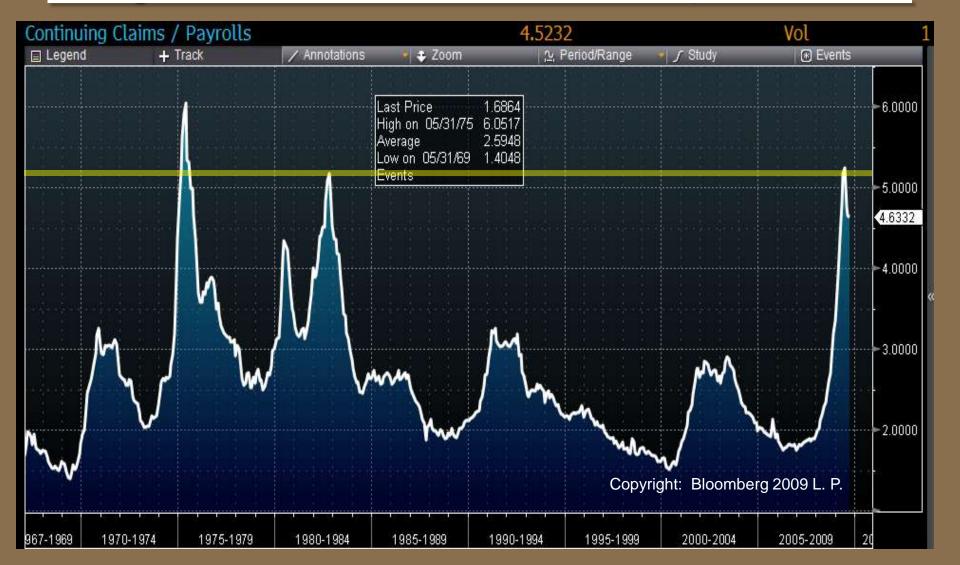


Quarterly change in GDP





Continuing Jobless Claims as a % of Non-Farm payrolls. Starting to decrease. Greater than '80-82 recession, less than '74-75



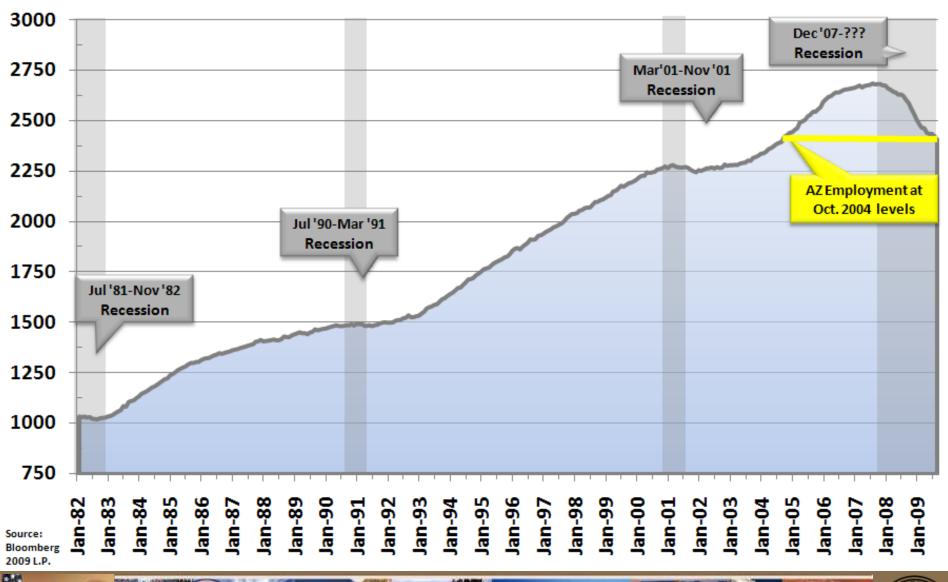


Change in Net Worth better, but still negative



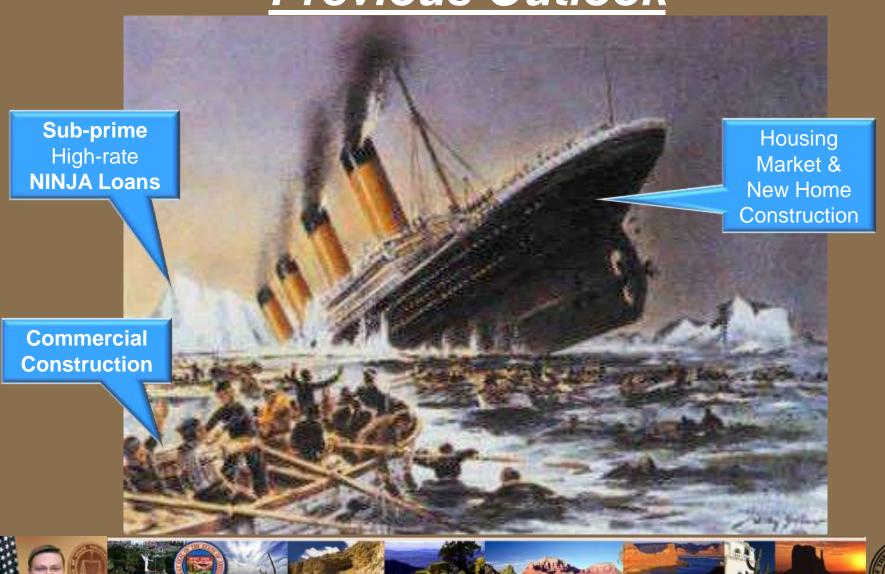


AZ Non-Farm Jobs





Housing & Construction Previous Outlook



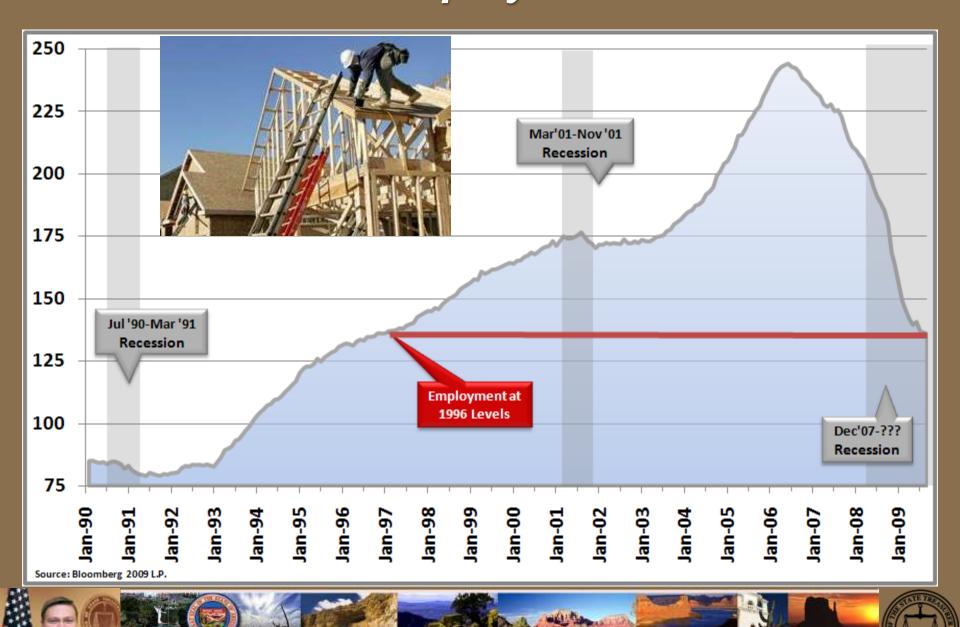
Housing & Construction Current Status



Commercial Property Bubble Burst Last Year



AZ Construction Employment at 1996 levels!

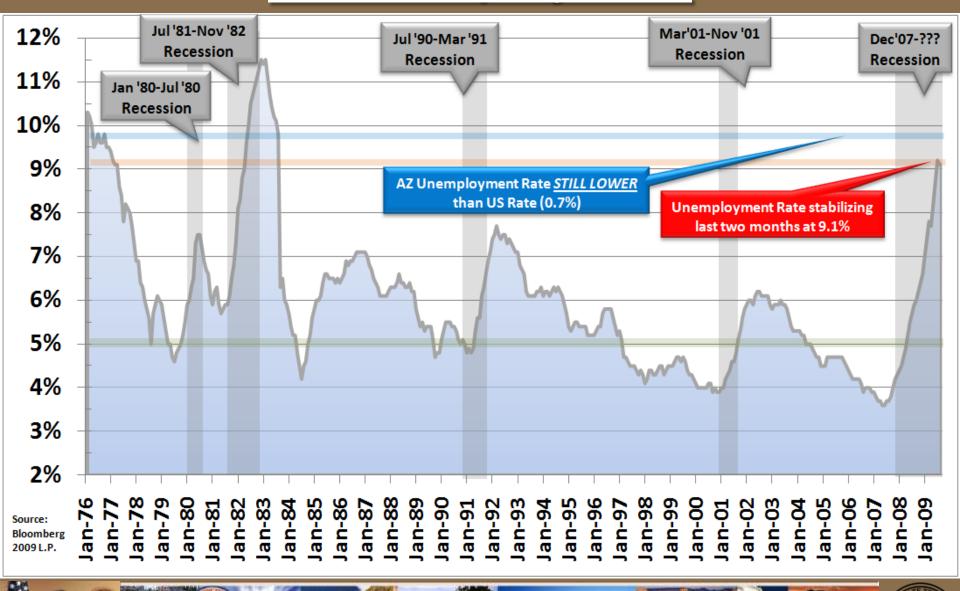


So how about some good news?



I just saved a bunch of money on my car insurance!

AZ Unemployment



13.5% of US Mortgages Distressed

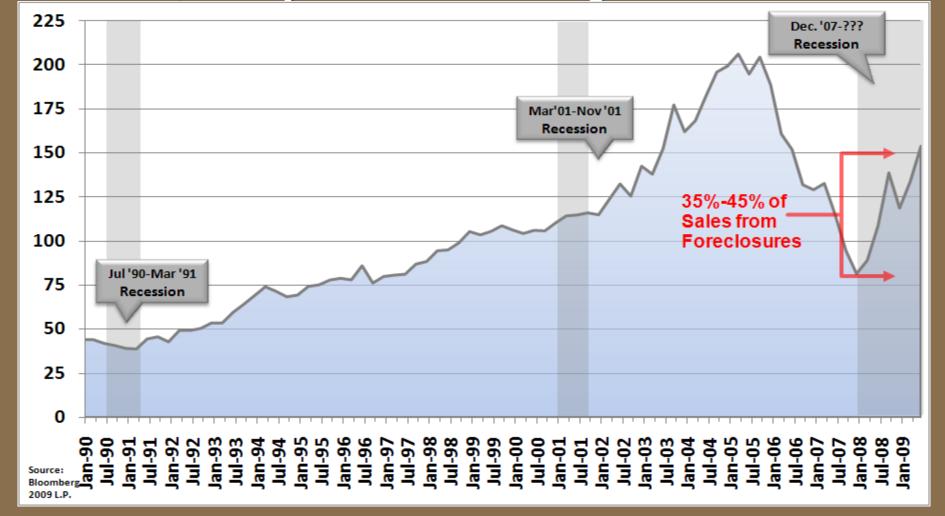




Arizona still Over Stocked on Homes, but improving

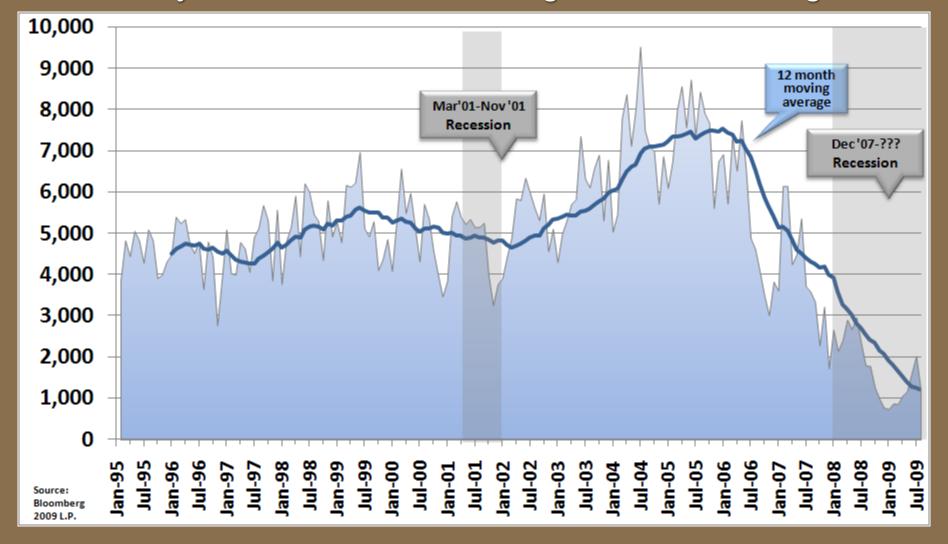


Arizona Sales of Existing Homes Moving Up Clearing out the surplus inventory of homes is good news! Quarterly Data Jan. 90 through June 2009



Arizona Housing Permits: Recovering?

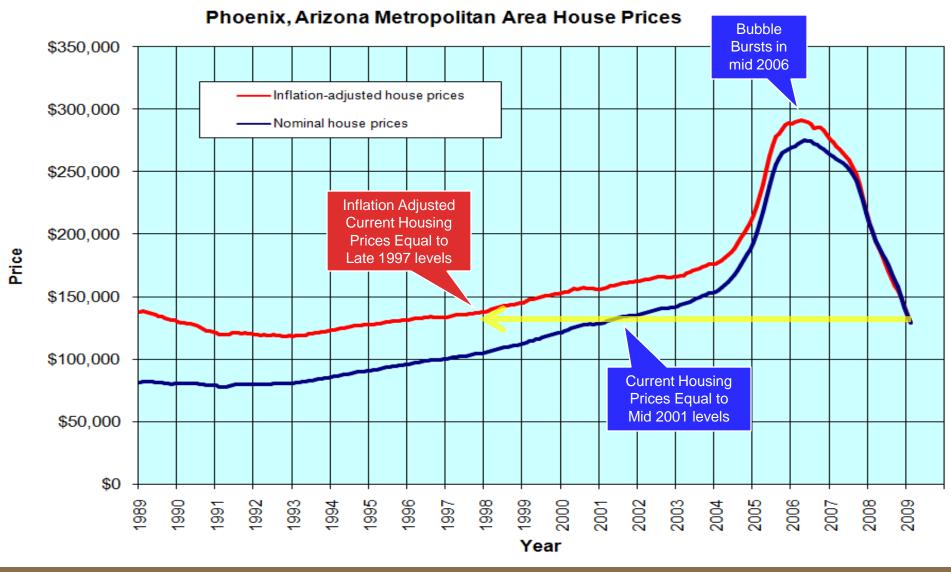
Total Monthly Arizona Residential Building Permits 1995 to August 2009





AZ Conventional Mortgage Price Index for Valley





Latest quarterly, median, existing, single-family home price provided by the National Association of Realtors. Trailing house price index data provided by Standard & Poors. Inflation data provided by the Federal Reserve Bank of Cleveland.

The chart on this page estimates the market value of today's median-priced house over time. The trailing nominal prices are derived by taking the recent median price of existing single-family homes, as reported by the National Association of Realtors, and discounting it by the S&P/Case-Shiller Home Price Index. The S&P/Case-Shiller HPI is a "constant quality" index, so even though houses are built larger today than they were many years ago, this graph automatically adjusts for this variation. The trailing inflation-adjusted prices are then derived by adjusting the nominal prices by the CPI-U Research Series Using Current Methods.

http://mysite.verizon.net/vzeqrguz/housingbubble/phoenix.html

Big Equity Rally off of March lows DOW, S&P 500 & 400 Quarterly since 1980



In October 2008 we forecasted the credit freeze would ease to "regular credit crunch" by year end.

3-month LIBOR vs overnight swap rate (spread)

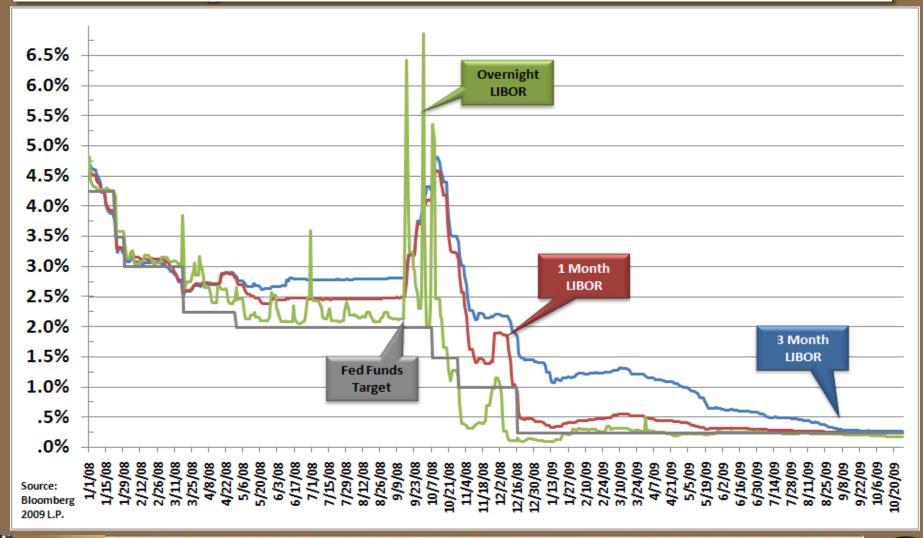


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ARIZONA STATE TREASURER

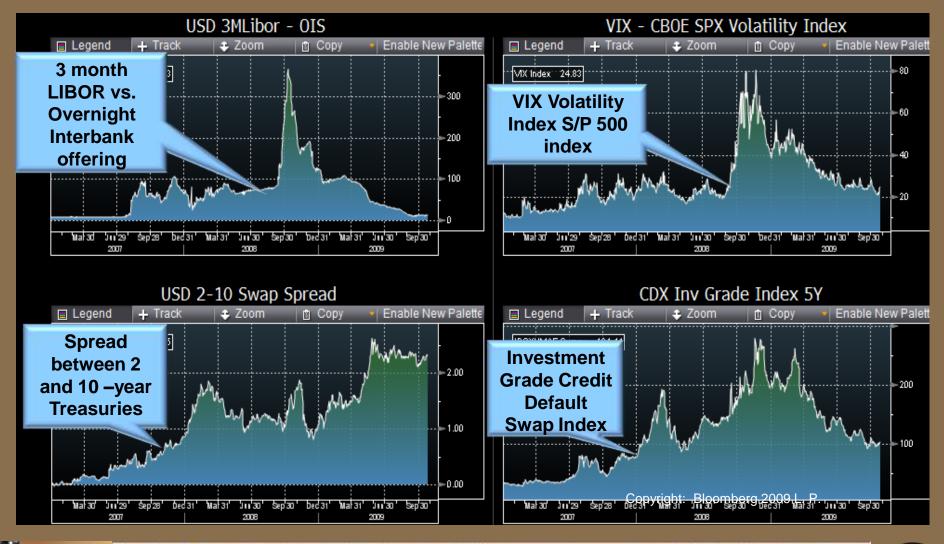
HON. DEAN MARTIN, TREASURER

<u>Freeze is over</u> <u>Measuring The Freeze LIBOR vs Fed Funds</u>





As Credit Crunch Eased, Other indicators also have eased but some still above normal ranges





Asset Backed Commercial Paper issuance growing as rates normalize and risk appetite increases





Global Losses Up \$135 billion to \$1.65 trillion Americas \$1.1 trillion!!

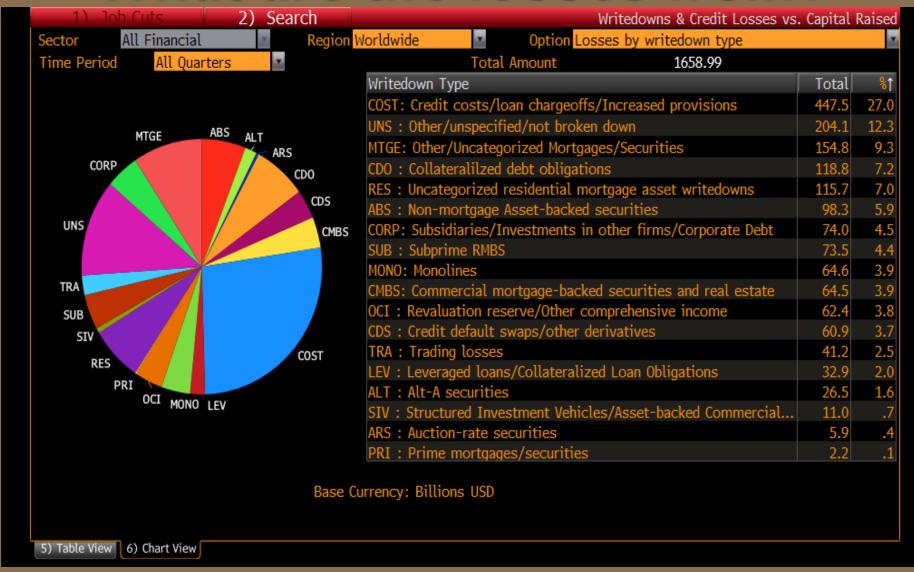
_													
Base	e Currency: Billions	USD	¥	Last Up	date: 10	/26/09 0	7:26:48				More Pe	riods	6) >>
		Tot	al	4 Q()9	3Q	09	2Q	09	10	09	4Q08	
10)	All Financial	Loss	Capital	Loss	Capital	Loss	Capital	Loss	Capital	Loss	Capital	Loss	Capital
11)	Worldwide	1659.0	1401.1	.0	13.7	37.1	69.3	127.2	118.2	147.6	255.9	380.2	447.6
12)	Americas	1111.0	759.6	.0	1.0	36.7	13.5	102.7	95.1	100.7	122.0	243.2	266.4
13)	Europe	505.6	532.9	.0	10.8	.4	35.6	23.9	11.5	43.7	114.4	132.7	152.5
14)	Asia	42.4	108.6	.0	1.9	.0	20.1		11.7		19.5		28.7
15)	Banks/Brokers												
16)	Worldwide	1174.5	1141.2	.0	13.7	37.1	57.1	72.5	79.4	101.0	180.3	269.5	377.8
17)	Citigroup Inc.	117.8	109.4	.0	.0	5.6	.0	10.3	.0	13.8	15.0	19.7	45.3
18)	Wachovia Corporation	101.9	11.0	.0	.0	.0	.0	.0	.0	.0	.0	49.8	.0
19)	Bank of America Corp.	80.0	99.3	.0	.0	10.1	.0		20.8	13.8	32.8	14.5	25.0
20)	JPMorgan Chase & Co.	57.0	50.7	.0	1.0	7.8	.0	8.0	5.0	7.7	.0	9.8	25.0
21)	Merrill Lynch & Co.	55.9	29.9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
22)	UBS AG	52.8	40.0	.0	.0	.0	.0	2	3.7	2.4	.0	2.0	6.3
23)	Insurers												
24)	Worldwide	246.6	141.7	.0	.0	.0	1.5	2.6	13.8	13.8	29.6	71.5	56.0
25)	American International Gr	101.4	96.1	.0	.0	.0	.0	11.6	4.8	2.5	25.0		40.7
26)	Ambac Financial Group	12.1	1.4	.0	.0	.0	.0	1.6	.0	-1.6	.0	1.5	.0
27)	Hartford Financial SVCS	11.6	6.4	.0	.0	.0	.0	8	3.4	.5	.0	5.1	2.5
28)	Metlife Inc	10.0	4.9	.0	.0	.0	.0	-2.1	2.7	6	.0	5.6	2.3
29)	Prudential Financial Inc	9.2	5.9	.0	.0	.0	.0	-2.5	1.2	2.9	1.7	3.0	.0
GSE													
30)	Freddie Mac	119.6	57.7	.0	.0	.0	.0	24.5	6.1	13.5	30.8	22.2	13.8
31)	Fannie Mae	118.3	60.5	.0	.0	.0	10.7	27.7	opy <mark>righ</mark>	r Bloom	nberg 20	nna 17. <u>A</u>	.0
	Table View 8) Chart View								орупуп	DIUUII	nberg 20	JUS L. F	

Freddie and Fannie now top Americas Losses!

All Fi	nancial			Last	Update:	10/26/0	9 07:26:	48			More P	eriods	4) >>	
		Total		4 Q	09	30	09	20	209	10	Q09	4	4Q08	
	egion	Loss	Capital	Loss	Capital	Loss	Capital		Capital					
7) W	orldwide	1659.0	1401.1	.0	13.7	37.1	69.3	127.2	118.2			_		
8) Ar	mericas	1111.0	759.6	.0	1.0	36.7	13.5	102.7	95.1	100.7				
9) Eu	ırope	505.6	532.9	.0	10.8	.4	35.6	23.9	11.5	43.7	114.4	132.	152.5	
10) As	sia	42.4	108.6	.0	1.9	.0	20.1		11.7		19.5		3 28.7	
Ameri	icas Data:									Base Cu	urrency:	Billions	USD	
F	irm	Loss↑	Capital	Loss	Capital	Loss	Capital	Loss	Capital	Loss	Capital	Loss	Capital	
11) F	reddie Mac	119.6	57.7	.0	.0	.0	.0	24.5	6.1	13.5	30.8	22.2	13.8	
12) F	annie Mae — 💙	118.3	60.5	.0	.0	.0	10.7		19.0	19.3	15.2	17.0	.0	
13) C	itigroup Inc.	117.8	109.4	.0	.0	5.6	.0	10.3	.0	13.8	15.0	19.7	45.3	
14) W	achovia Corporation	101.9	11.0	.0	.0	.0	.0	.0	.0	.0	.0	49.8	.0	
15) A	merican Internation	101.4	96.1	.0	.0	.0	.0	11.6	4.8	2.5	25.0	23.3	40.7	
16) B	ank of America Corp.	80.0	99.3	.0	.0	10.1	.0	13.3	20.8	13.8	32.8	14.5	25.0	
17) J	PMorgan Chase & Co.	57.0	50.7	.0	1.0	7.8	.0	8.0	5.0	7.7	.0	9.8	25.0	
	errill Lynch & Co.	55.9	29.9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
19) W	ashington Mutual Inc.	45.3	12.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
20) W	lells Fargo & Company	38.0	50.4	.0	.0	5.6	.0		8.6		.0	8.6	36.0	
21) N	ational City Corp.	25.2	8.9	.0	.0	.0	.0	.0	.0	.0	.0	19.9	.0	
22) M	organ Stanley	23.3	28.8	.0	.0		.0		4.2		.0	5.8	19.0	
23) L	ehman Brothers Holdin	16.2	13.9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
24) P	NC Financial Service		8.7	.0	.0	.9	.0		.6	4.8	.0		7.6	
	mbac Financial Grou ble View 6) Chart View	12.1	1.4	.0	.0	.0	.0	1.6	.0	-1.6 opyright	.0	1.5	.0	



What are the losses from?







Mortgage **Securities \$154.8** Billion

MTC ALT ARS CORP CDO CDS CMB TRA SUB COST

Credit Costs / Other Loan Charge offs **\$447.5** Billion



Other: \$204.1 Billion



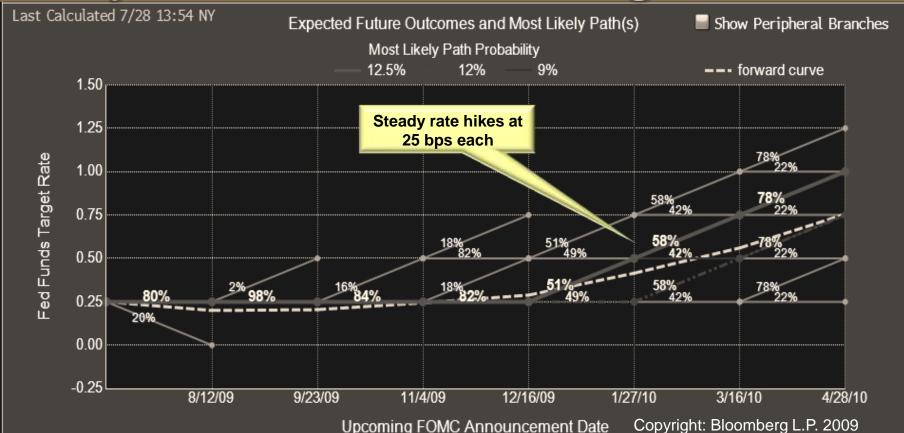
Mortgage Asset Write-downs: \$115.7 Billion



Interest Rate & Yield Outlook



July 2009: Rates rising in 2010



Note: These scenarios were calculated using Fed Funds futures data. The most likely paths are indicated in red. The dotted yellow line represents the average expected outcome (forward curve), or the spine of the tree. Warning: The transition probabilities in the tree are estimated from potentially insufficient information about dynamics of rate changes between two FOMC meetings.

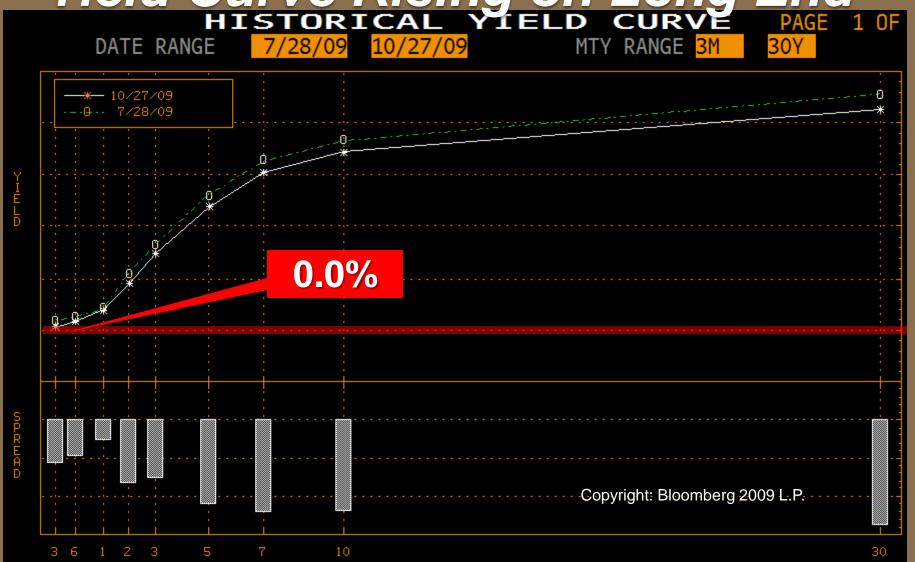
Current Implied Probability | Historical Implied Probability | Future Implied Probability



Oct. 2009: Rates won't rise as fast in 2010



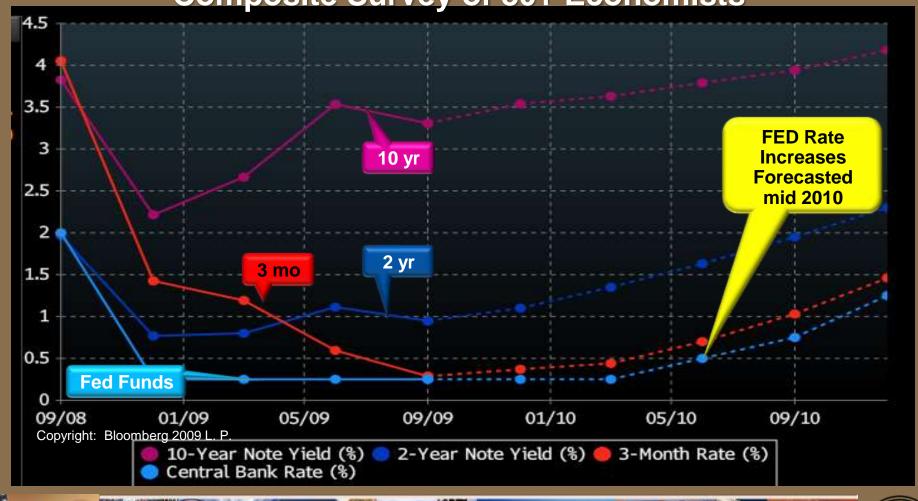
Yield Curve Rising on Long End





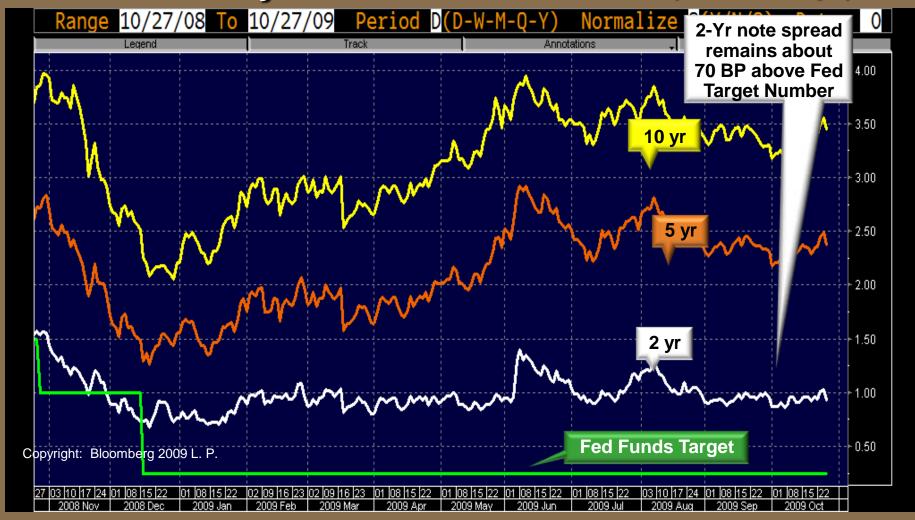
Short Term Interest Rate Forecast: Starting to rise in early 2010

Composite Survey of 80+ Economists



Market Reaction to Rate Cuts

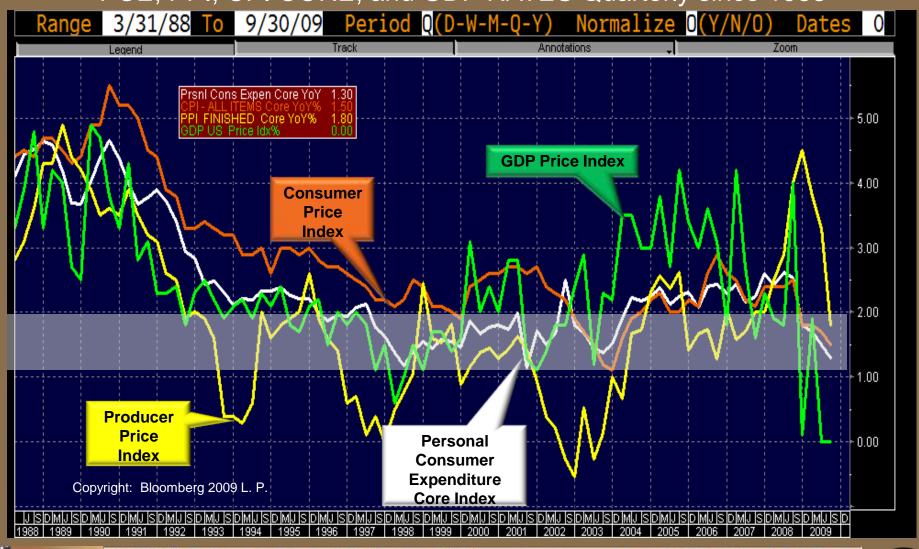
US Treasury Yields vs. Fed Funds (last 360 days)





Inflation or Deflation?

PCE, PPI, CPI CORE, and GDP RATES Quarterly since 1988

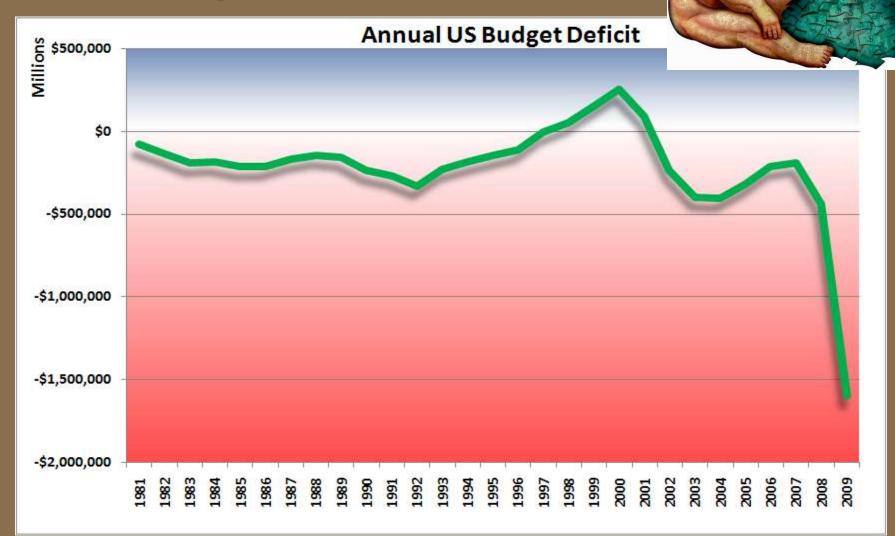




Government Spending impact on Inflation



Annual US Budget Surplus / Deficit



Cumulative Total US Debt since 1981

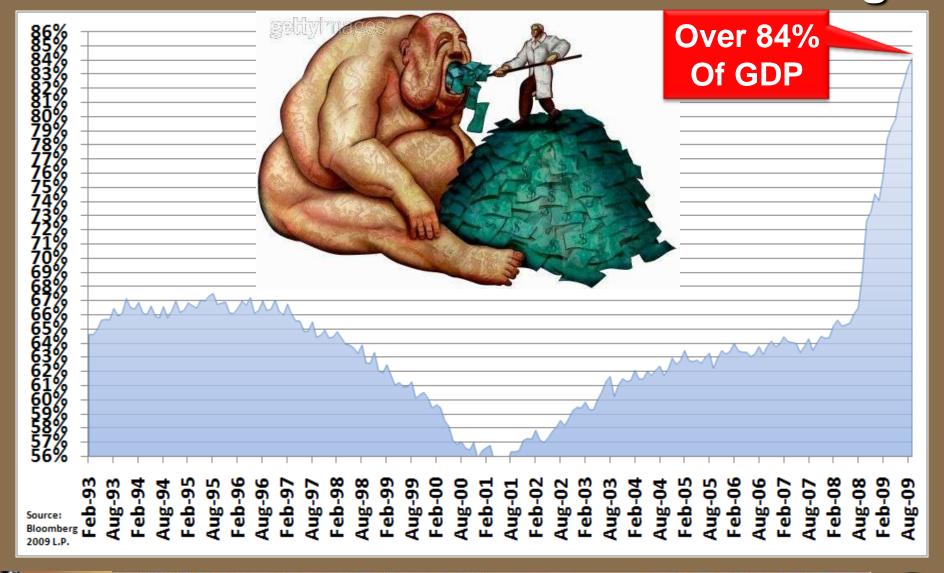
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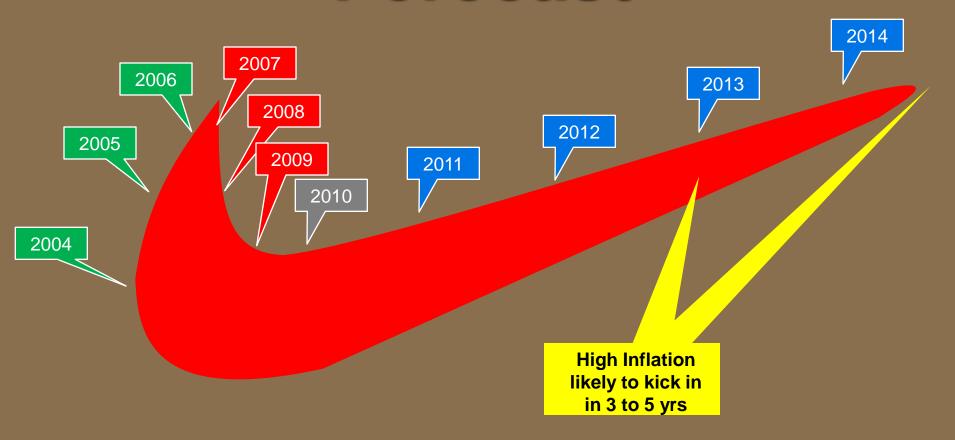
Federal Debt as % of GDP is Soaring



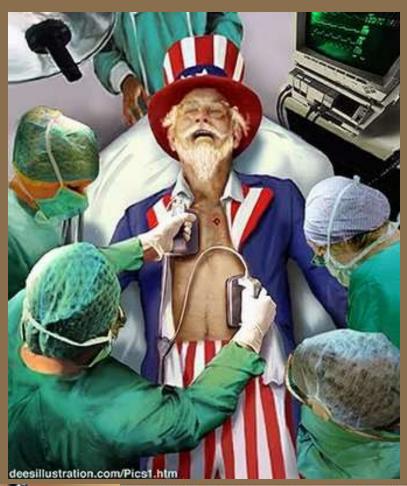
Chasing Lenders (China is #1 lender to U.S.)

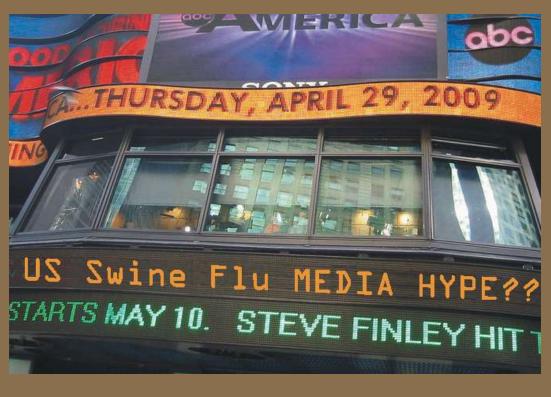


"Nike" Whoosh Forecast



Swine Flu going to prolong the US recession?

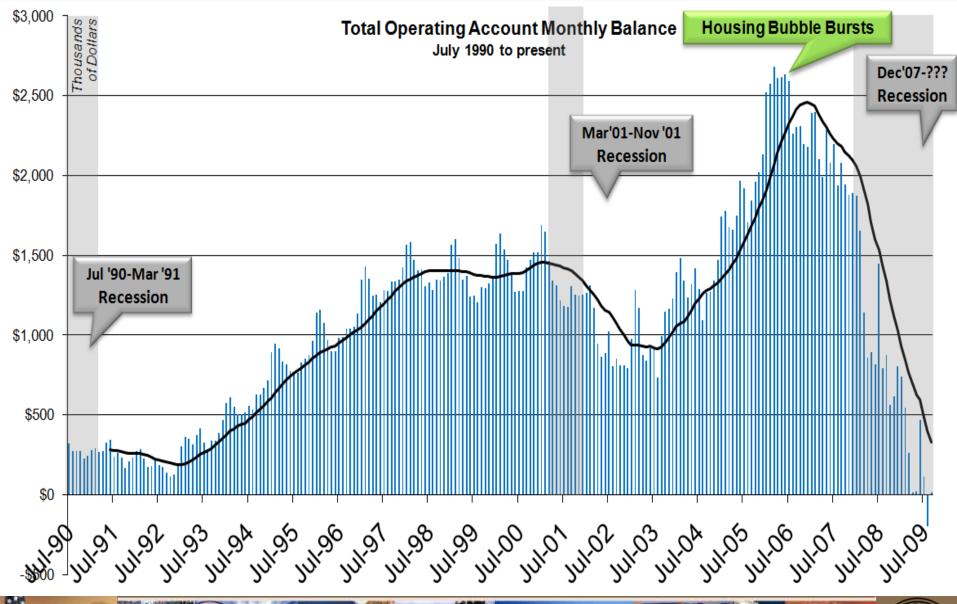


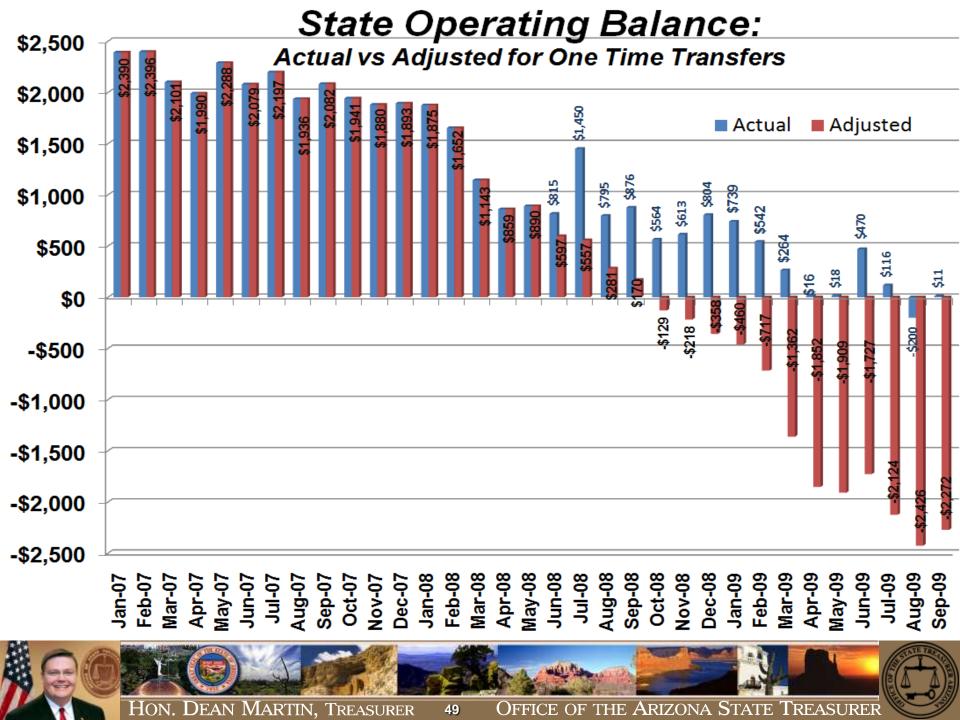


State Budget Update



State Total Operating Account Average Monthly Balance





State of Arizona Operating Cash Balance On A Downward Trend

Percent Change in Operating Account Balance



How did we keep the lights on?

Where did the money come From?





Where did the money come From?



- State Agencies Diversified Pool 3.
- Has about \$1.2 billion in assets.
- Consists of non-general fund state agency funds allowed to earn interest.
- Purchased Treasurer's Warrant Notes rather than Treasuries, Agencies, or Repo.

We Will Not Tap Any LGIP Funds For State Borrowing.

LGIP Performance

4th Quarter and FY 2009 YTD

S & P Rating of Pool 5

AAAf/S1

We Continue
To Maintain
The Highest
Rating From
S & P



\$1 \$2 \$3 \$4 \$5 \$6

AAAf AA+f **AAf** AA-f A+f Af A-f BBB+f **BBBf BBB-f** BB+f **BBf BB-f** B+f Bf B-f CCC+f **CCCf**



FY 10 Performance

Operating Revenue to the State of Arizona
State Agencies, Endowment and LGIP Clients

YTD FY 2010 Earnings Distributed:

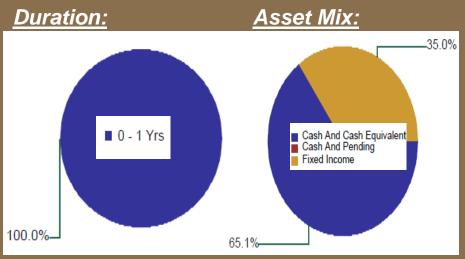
\$26,539,605

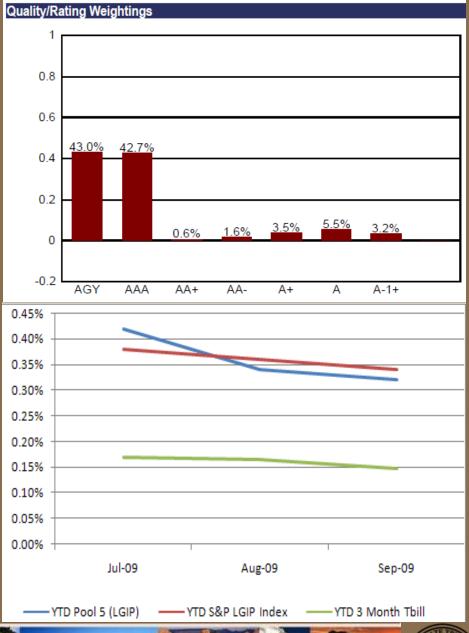
(\$337,349 thousand for general fund) (\$18.1 million for State Agencies) (\$8.06 million for Local Govt.'s)

LGIP – Pool 5

- \$1.576 Billion as of 9/30/09
- WAM 40 days* (weighted average maturity)
- NAV .998 (Net Asset Value)

Total Net Assets (Millions) 1,576.0
Weighted Average Life (Years) 0.25
Weighted Avg. Effective Duration (Years) 0.07
Weighted Average Rating AAA
Number of Holdings 52

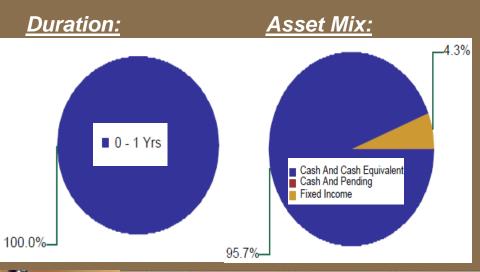




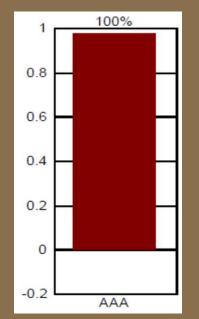
LGIP – Pool 7

- \$2.6 Billion as of 9/30/09
- WAM 22 days* (weighted average maturity)
- NAV \$1.00 (Net Asset Value)

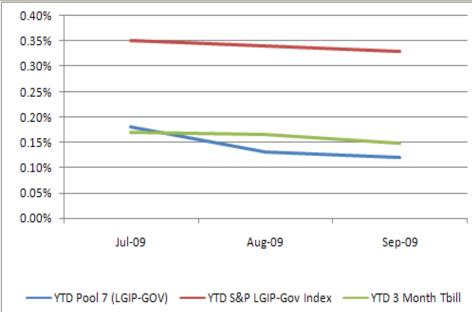
Total Net Assets (Millions) 2,601.0
Weighted Average Life (Years) 0.07
Weighted Avg. Effective Duration (Years) 0.05
Weighted Average Rating AAA
Number of Holdings 28



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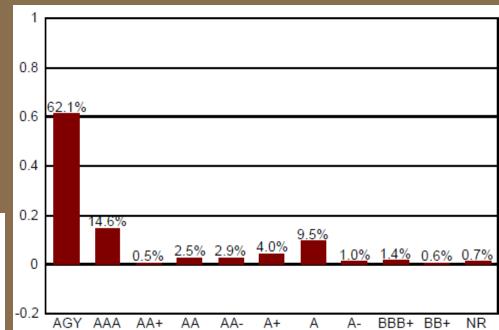
- Short Term Fixed Income
- Full Faith & Credit (Backed by US Treasuries Only)

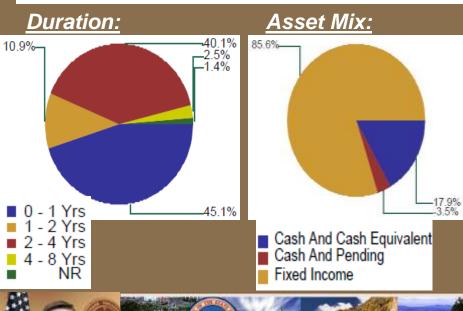


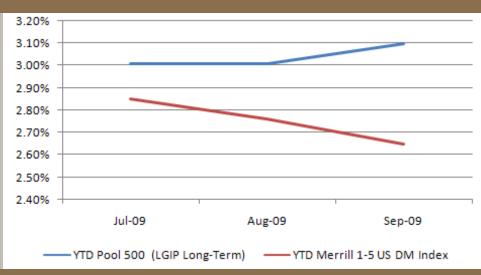
LGIP – Pool 500

- Long Term Fixed Income
- \$72.9 million as of 9/30/09
- Duration 1.52 years
- Floating Net Asset Value

Total Net Assets (Millions) 72.9
Weighted Average Life (Years) 1.78
Weighted Avg. Effective Duration (Years) 1.52
Weighted Average Rating AA+
Number of Holdings 119





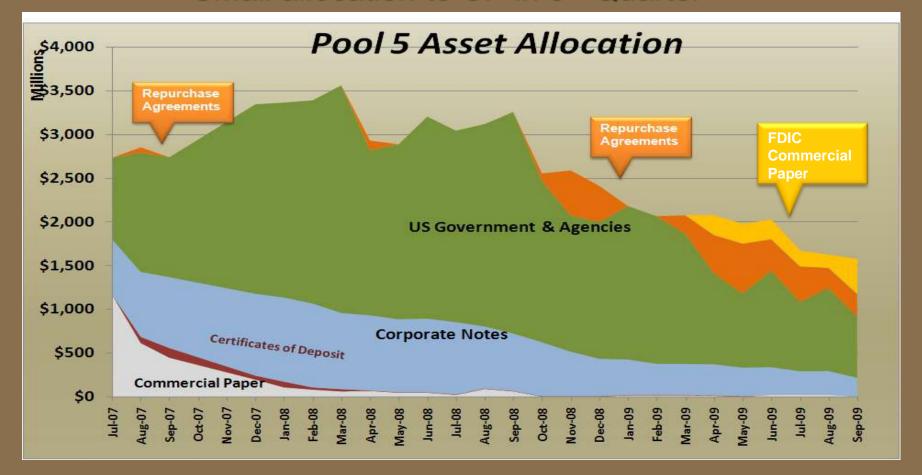




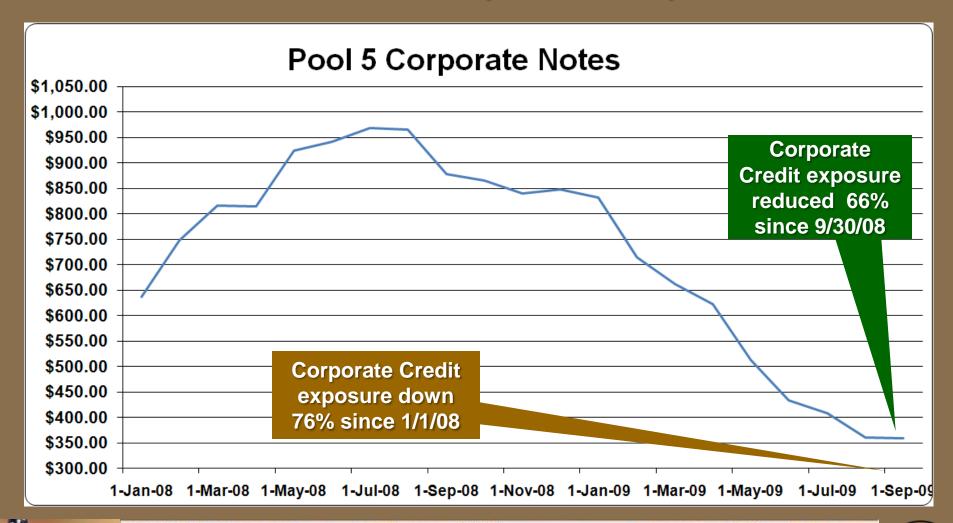
Responding to Credit Crunch:

Increased Allocation to UST and US Govt. Agency Discount Notes

Small allocation to CP in 3rd Quarter

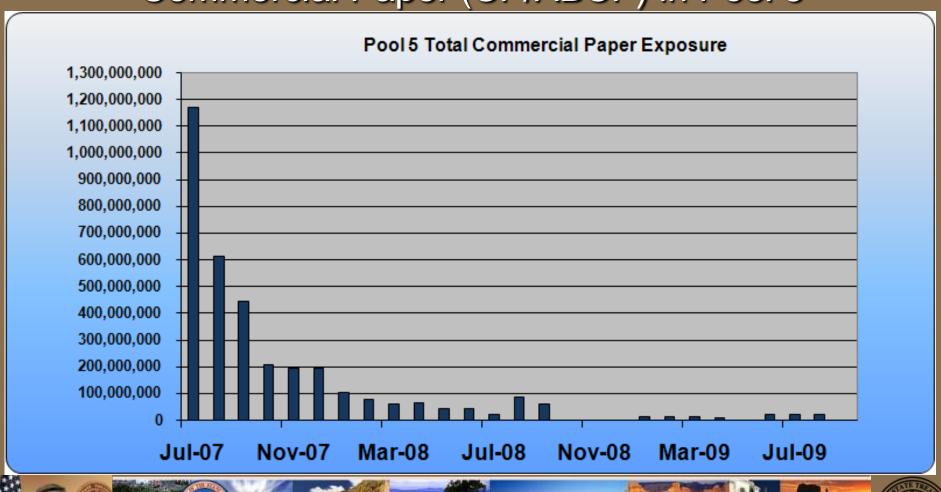


Responding to Credit Crunch: Reduction in Corporate Exposure



Responding to Credit Crunch:

Reduction in Commercial Paper and Asset Backed Commercial Paper (CP/ABCP) in Pool 5



Responding to Credit Crunch:

Only 15 Corporate Credits Remain in Pool

Holding	s Rem	naining:

American Express	\$ 2.5 million
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ATT	\$22.5 millio	on
	Ψ Z ZIO IIIIIII	١

Caterpillar \$ 5.0	million
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Walt Disney	\$15.0 million
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Bank of America	\$10.0 million

Coca-Cola C	P	\$20.0 million
	· · ·	

Total	\$208.9 million
	4_0010 111111101

NEW LGIP Improvements

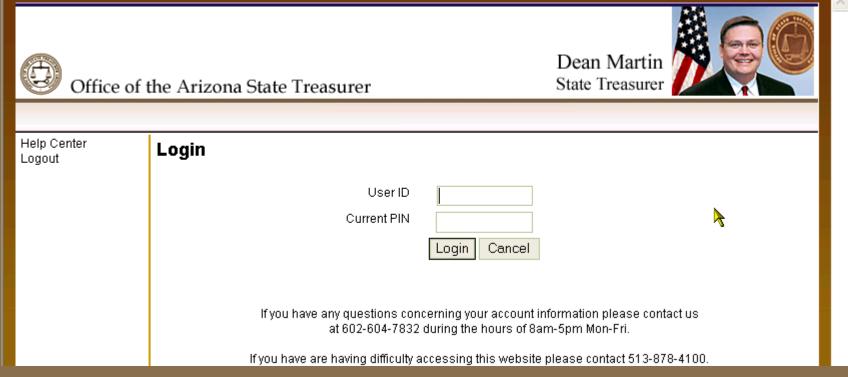
- New Custodian Bank April 1st.
- Accounting transition took place July 1.
- •Statements should be available faster (conversion issues delayed some statements, but those issues should now be resolved).
- •Better on-line access to accounts (Online Yield coming soon!)
- •Securities Lending to cover cost of contract and possibly provide additional revenue to investment pools.

NEW LGIP Online Account Access

http://www.AzTreasury.gov/lgip.html

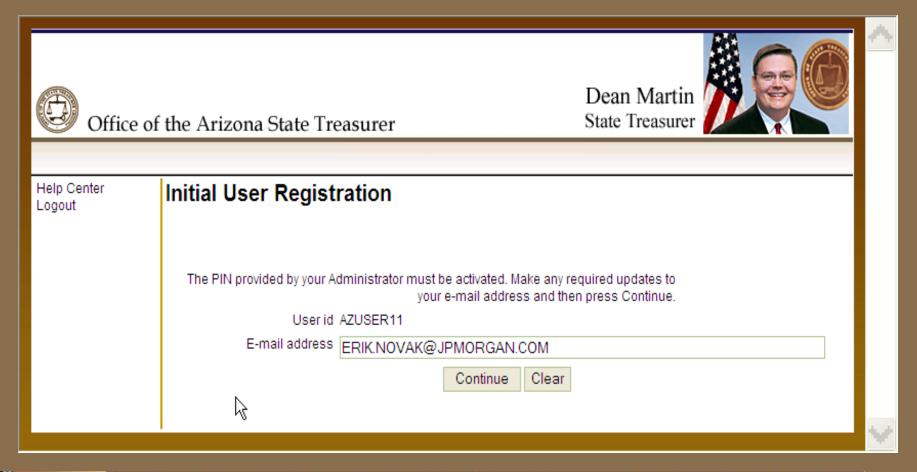


Online Access Available Now for All LGIP Accounts



- •All IPAS users already sent User ID & PINs
- Non-IPAS users will receive User ID & PINs from JP Morgan Chase in about a week

When you logon to the site for the first time, you will be asked to verify your Email address to proceed.



Provides List of all Accounts



Office of the Arizona State Treasurer

Dean Martin State Treasurer



Account Listing

Account Detail
Purchase
Redemption
Exchange
Transfer
Account History
Pending Transactions
Reports
E-mail Change
Help Center
Logout

Account Listing

Registration

CITY OF BOSTON SCHOOL DEPT

Fund	Number	Shares	Price	Balance
SMALL CAP FUND (MMMG)	1141	210.526	\$12.49	\$2,629.47
CORE BOND FUND (GWKE)	998	0.000	\$9.37	\$0.00
CORE BOND FUND (GWKE)	1141	0.000	\$9.37	\$0.00
MONEY MARKET FUND (TSGXX)	998	9,144.230	\$1.00	\$9,144.23
MONEY MARKET FUND (TSGXX)	1141	15,005.000	\$1.00	\$15,005.00
		Portfolio Totals		\$26,778.70

Click on the fund name to view account information.





Deposits Can Be Made Online



Office of the Arizona State Treasurer



Account Listing Account Detail

Purchase

Help Center

Logout

Redemption
Exchange
Transfer
Account History
Pending Transactions
Reports
E-mail Change

Purchase - Step 1 of 3

Account Registration CITY OF BOSTON SCHOOL DEPT

Account Number/Fund 998/MONEY MARKET FUND V

Purchase Amount

Purchase Method FED WIRE 🕶

Dollar Amount

Contact Info

E-Mail Address ERIK.NOVAK@JPMORGAN.COM

Next Step | Cancel

The Arizona State Treasurer Investment Services Group is available 8am – 5pm, Monday through Friday. The telephone number is 602-604-7832.

Online Withdrawals



Office of the Arizona State Treasurer

Dean Martin State Treasurer



Account Listing
Account Detail
Purchase
Redemption
Exchange
Transfer
Account History
Pending Transactions
Reports
E-mail Change
Logout

Redemption - Step 1 of 3

Account Registration CITY OF BOSTON SCHOOL DEPT

Account Number/Fund 1141/SMALL CAP FUND

Redemption Amount

ODollar Amount O All Holdings

Amount

Payment Method

Contact Info

E-Mail Address

ERIK.NOVAK@JPMORGAN.COM

Next Step Cancel

Wire Payment 🕶

The Arizona State Treasurer Investment Services Group is available 8am – 5pm, Monday through Friday. The telephone number is 602-604-7832.

Transfers Between Accounts



Office of the Arizona State Treasurer

Dean Martin State Treasurer



Account Listing Account Detail Purchase Redemption Exchange

Transfer

Account History
Pending Transactions
Reports
E-mail Change
Help Center
Logout

Transfer	-	Step	1	of	3
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Account Registration CITY OF BOSTON
SCHOOL DEPT

From Account Number/Fund 1141/CORE BOND FUND

To Account Number/Fund

Transfer Amount

O Dollar Amount O All Holdings

Contact Info

Amount

E-Mail Address

ERIK.NOVAK@JPMORGAN.COM

Next Step Cancel



The Arizona State Treasurer Investment Services Group is available 8am – 5pm, Monday through Friday. The telephone number is 602-604-7832.



View Pending Transactions



•This page displays any trades that have been placed but have not posted. Example: Future dated trades.



Obtain Account History



Office of the Arizona State Treasurer

Dean Martin State Treasurer

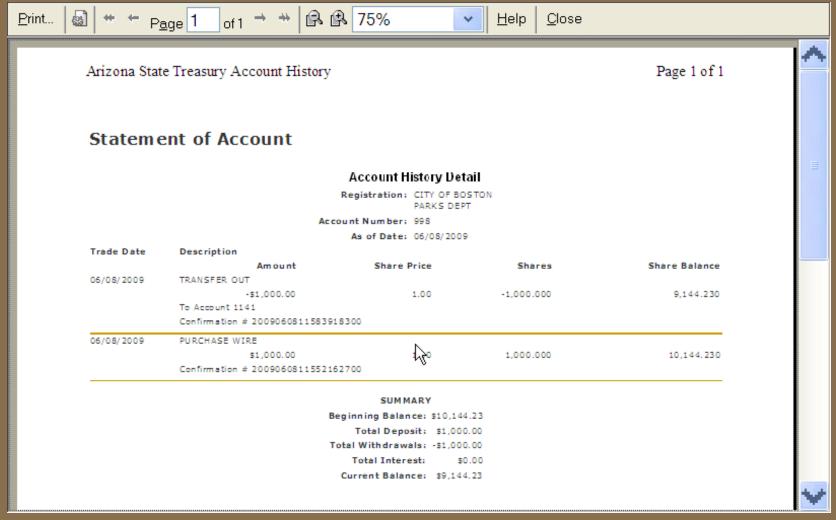


Account Listing
Account Detail
Purchase
Redemption
Exchange
Transfer
Account History
Pending Transactions
Reports
E-mail Change
Help Center
Logout

Stateme	nt of A	Account			
Account Num	ber/Fund	998/MONEY MAI	RKET FUND	~	
	Start Date DD/YYYY)	06 / 08 / 2009			
	End Date DD/YYYY)	06 / 08 / 2009			
Transac	tion Type	All Transactions	~		
		Display History	Downloa	d Transactions	Quicken-Qif Format
					Spreadsheet
Trade Date	Descript				
00/00/0000	TRANSE	Amount	Share Price	Shares	Share Balance
06/08/2009	TRANSF	-\$1,000.00	1.00	-1,000.000	9,144.230
	To Accou		1.00	-1,000.000	9,144.230
		ation # 20090608115839	18300		
06/08/2009	PURCH	ASE WIRE			
		\$1,000.00	1.00	1,000.000	10,144.230
	Confirma	ation # 20090608115521	62700		
			SUMMARY		
		Regin	ning Balance: \$10,	144.23	
		_	Fotal Deposit: \$1.0		
			Withdrawals: -\$1,0	NL.	
		1	Total Interest:	\$0.00	
		Cur	rent Balance: \$9,	144.23	



Search for Specific Time in Account History



The history page can be previewed or printed. You may preview the results first through File menu, or just press the print button on your browser.



2010 Legislative Agenda

2009 Legislative Agenda

- •<u>HB2271</u>: Moves mid-term Pools 500 and 700 from Title 41 to Title 35 and allows State Funds to participate in mid-term pools. THIS MEANS YOU DO NOT NEED A NEW RESOLUTION TO START INVESTING IN POOL 500 or 700.
- •<u>HB2425</u>: Lowers the maximum management fee from 12 to 6 basis points (currently 6 basis points). Allows operations of office to be paid for from management fees.
- •HB2103: Allows office to hire legal counsel.

Thank You for your support!

2010 Legislative Agenda

- Sunset Review of Board of Investment
 Adding Confirmation Process
- Add BOI member for Endowments
- Codify practice of quarterly meetings
- Constitutional Changes for Endowment
 Distribution and Investments

Endowment Performance 4th Quarter FY 2009



Endowment FY 10 1st Quarter

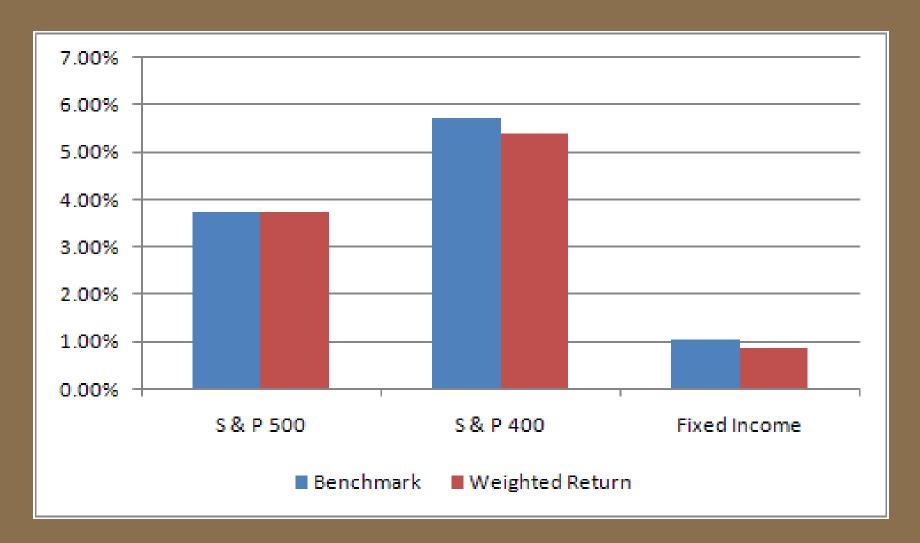
(in Thousands)

Change since FY 2009 YOY



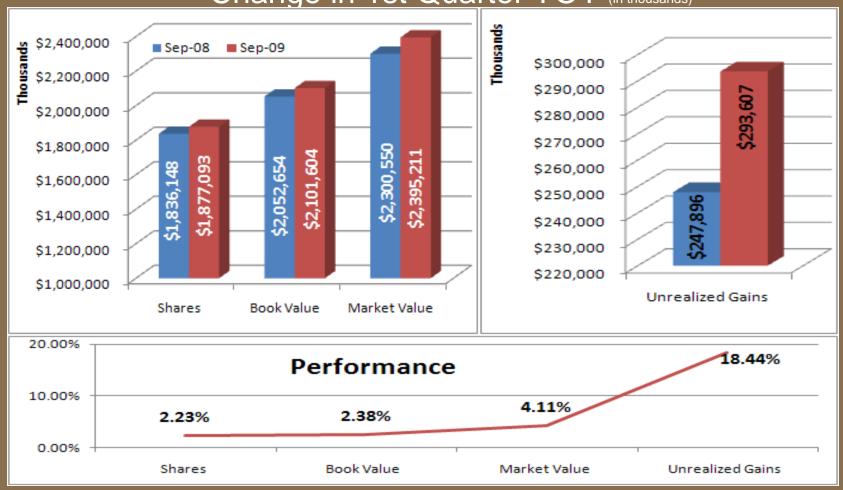
Endowment FY 10 1st Quarter

(in Thousands)

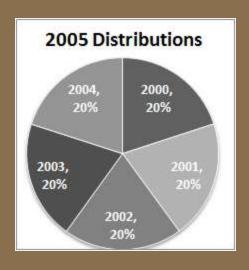


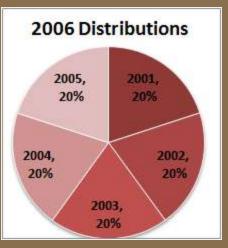
Permanent School Fund

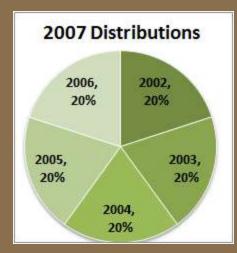
Change in 1st Quarter YOY (in thousands)

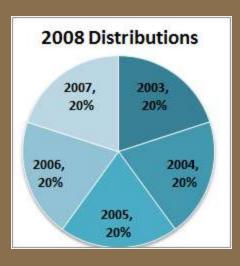


Distributions are based on a five year rolling average









Beneficiaries receive 20% of each year's earnings (less inflation) for five years.

How the Formula Works

(Permanent Fund example)

YEAR	Rate of Return	GDP Price Deflator	Avg. Market Value
FY 2000	4.71%	2.05%	\$ 870.8 million
FY 2001	4.39%	2.53%	\$ 936.0 million
FY 2002	(0.38%)	1.63%	\$ 968.3 million
FY 2003	6.10%	2.04%	\$ 945.0 million
FY 2004	8.93%	2.92%	\$1,104.5 million
FY 2005	6.59%	2.90%	\$1,374.2 million
FY 2006	4.68%	3.53%	\$1,745.2 million
FY 2007	12.07%	2.77%	\$2,042.9 million
FY 2008	(2.46%)	1.95%	\$2,377.7 million
FY 2009*	(11.4%)	1.48%	\$2,176.8 million
Average	1.90%	2.53%	\$1,943.4 million

5 average of annual rate of return – 5 year average of GDP price Deflator X

Average monthly market value for previous 60 months = Next Year's Distribution



Constitutional Formula

- Although 5 year performance is positive and producing earnings,
- 5 year inflation average is higher.
- When inflation exceeds earnings, the Constitution & Enabling Act prohibits distributions by the Board of Investments.
- We recommend changing the formula to a much more stable and predictable 2% of market value.
- Prevents wild swings in distributions.
- More predictable distributions to beneficiaries.

How Does Arizona's Endowment Compare To Other Endowments?

How Does Arizona's Endowment Compare To Other Endowments?

FY09 1st & 2nd quarter market value						
University of	Yale	Harvard	Boston			
Chicago	Endowment	Endowment	College			
down 25-30%	down 25%	down 22%	down 25%			

Arizona State Trust Endowment Relative Market Value Change Outperformed by:							
14-19%	14%	11%	14%				

Our Investment Philosophy

SAFETY before LIQUIDITY

before

YIEL

Questions?

Please use chat or phone

remember to identify yourself!

THANK YOU
We Appreciate Your Business!!!
Next Quarterly Meeting:
Thursday, January 28, 2010 1:30pm